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May 15, 1996

VIA FEDERAL EXPRESS

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

Re: In the Matter of)
Implementation of the Local Competition)
Provisions in the Telecommunications Act) CC Docket No. 96-98
of 1996)

Dear Mr. Caton:

We are attaching Comments relative to subject docket, original and 12 copies.

Respectfully submitted,

Robert A. Hart IV, Owner

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RAH:AE
Encl.

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
	)	

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

COMMENTS OF ROBERT A. HART IV

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May 15, 1996

SUMMARY OVERVIEW OF LOCAL EXCHANGE - REGARDING SECTION II, B-2 AND C-5:

It is our opinion that the fundamental situation to be resolved relative to Competition In The Local Exchange (CITLE) is how to provide a compromise framework enabling a "graceful transition". A related fundamental issue is "Who will pay?". These comments attempt to offer insights into a proposed conversion path.

COMMENTS:

Fundamental tough decisions must be made by the leaders of our country relative to Competition In The Local Exchange (CITLE). Our comments are as follows:

1. A definition of the local exchange should be established.
2. A definition of competition within the local exchange should be established.
3. Should competition in the local exchange be just an illusion (i.e. resell) or facility based?
4. Should facility based competitors simply place a switch and some fiber in select areas and target only prosperous customers, historically referred to as "cream skimming"?
5. Who will pay for Competition In The Local Exchange if there are costs associated with implementation of CITLE?
6. Should Competition In The Local Exchange be a "graceful evolution" similar to "divestiture"? *

*Throughout this document, "divestiture" refers to the "breakup of Bell and AT&T".

At this point in time in our history, we applaud the courage of our national leaders to enact the Telecommunications Act of 1996. The United States is clearly entering the "information age". A monopoly "bottleneck" with a dictate within the local exchange is not appropriate for the future relating to control and other issues. The pro-competitive approach may stimulate investments in applications of new and exciting technologies in the once believed "mature" local exchange.

It is our opinion that:

1. "Divestiture" was an astounding success.
2. The transition to Competition In The Local Exchange be handled within a framework as closely resembling "divestiture" as possible; a graceful evolution to a relatively few facility based providers (with unlimited resellers or marketeers) with an associated floor relative to rate of return during the transition (or longer) for the Carriers of Last Resort (COLR). We acknowledge that the embedded LECs have huge investments, stockholders, obligations to serve, etc.
3. The entire local exchange is a natural monopoly.

4. Unleashing pure competitive forces unrestrained to cannibalize the local exchange may not be in the public interest.
5. CITLE is in the public interest to negate centralized control, encourage duplicity for increased reliability, allowing huge corporations to "reengineer" their organizations, stimulate investment, etc.

In our opinion, this transition should be orchestrated and monitored by both State and Federal leaders. This transition must be a win-win-win situation for all involved. We have studied CITLE for several years and have strong beliefs. We witnessed and helped implement "divestiture".

Our opinions related to the questions appearing at the beginning of this Comment are:

Item 3:
Q. Should competition in the local exchange be just an illusion (i.e. resell) or facility based?
A. Both

Item 4:
Q. Should facility based competitors simply place a switch and some fiber in select areas and target only prosperous customers, historically referred to as "cream skimming"?
A. No.

Item 6:
Q. Should Competition In The Local Exchange be a "graceful evolution" similar to "divestiture"?
A. Yes.

We believe these are the easy questions. The more complex issues are:

1. What is the "local exchange"?
2. What will be acceptable Competition In The Local Exchange?

We believe competition in the local exchange should include a modest level of duplicated facilities over time in all portions of the local exchange. With this premise in mind, one must then ask the really tough question:

Item 5:
Q. Who will pay for Competition In The Local Exchange if there are costs associated with implementation of CITLE?
A. The easy answer to the question "who will pay?" is: the customers; the public, of course. One must visualize costs in a larger framework to properly address this question.

New companies may emerge relative to this "once in a lifetime" opportunity with

investors that will wait for a dividend. New investments in the local exchange (and improvements easily made to huge amounts of existing infrastructures) will ultimately effect in a positive way:

a) The fuel situation
b) The environment
c) Education
d) Healthcare
e) Employment opportunities
f) Entrepreneurial spirit
g) Greater dissemination of information,
h) and the list goes on and on.....

The question of "who pays" has been studied. In our opinion, the question should be: "Do the short term costs seriously outweigh the long term benefits?". The answer is "no", as evidenced by the overwhelming support in Congress and the Executive branches of our country with the passage of the Telecommunications Act of 1996.

As a result of "divestiture", we believe the United States has been covered with fiber optics - city to city - multiple routes; AT&T lost market share and has emerged a very strong and powerful company (large enough to divide itself into three companies recently). The competitive interexchange market has leading edge technology as compared to the rest of the world and is still vibrant.

The RBOCs (Regional Bell Operating Companies) will be able to compete in the interexchange arena, provide video, and regain a position in manufacturing. We believe these are very exciting and lucrative prospects for the RBOCs.

What is the local exchange?

For simplicity, the local exchange can be categorized as follows:

a) Switches (end offices) - A switch that provides dial tone to a customer's telephone.
b) Wire (twisted pair) - Extended from the switch to the customer.
c) In each LATA (Local Access Transport Area):
    1) At least one LATA tandem (connects switches to switches) to enable all end office switches to connect to each other within a LATA.
    2) A transport network to connect the end office switches to the LATA tandem(s). Usually this is just wire (twisted pair) with digital transmission equipment (like digital radio) operating on the wire (and/or fiber optic facilities).
    3) An access tandem - a switch to enable all end office switches access to competitive interstate (interLATA) carriers (ICs).
    4) An E911 system - (a computer with connections to the tandem switches).
    5) An Operator system (for local types of services not provided by the ICs - similar to Item 4 above).

6) A Directory Assistance system (similar to Item 4 above).
7) Many operational support systems to assist in keeping everything working.
8) Land and buildings to house people and equipment.
9) A combination of "in-band" and an advanced signaling system; the advanced signaling system eventually connecting to all switches, etc., to enable the system to perform. This signaling system is related to the abstract concept of the "intelligence" associated with the "local exchange" network.
10) Numerous miscellaneous items of equipment, phone books, personnel of all sorts, etc., that are not uncommon to most other large businesses.

We have developed what we believe to be a safe approach to provide the first phase of competition in the local exchange.

OVERVIEW OF LOCAL EXCHANGE:

1. End office switching systems.
2. Twisted pair wire (and other transport mechanisms) from the switches to the customer.
3. IntraLATA network (i.e. E911, LATA transport, LATA tandem(s), access tandem(s), operator service systems, directory assistances.
4. Network intelligence systems.
5. Traditional large business segments (i.e. personnel, support professionals, billing systems, operation support systems, etc.)
6. Miscellaneous.

WHAT ARE THE SERVICES PROVIDED BY THE LOCAL EXCHANGE?

1. Primarily ubiquitous switched telecommunications services (including analog data transmission).

2. Numerous other switched and non-switched services on a custom designed per customer use basis.

PROPOSAL

Phase One:

1. We propose that the RBOC be subdivided by tariff ("unbundled") into numerous elements within the categories of:

   a) Access to switches.
   b) Access to wire (or digital loop carrier systems) from switch to all customers.
   c) Network intelligence.

d) E911 access, transport and system utilization.
e) Transport and use of LATA tandem.
f) Transport and use of access tandem.
g) Operator service system, directory assistance system access, transport and system utilization.
h) Use of telephone numbers, etc.
i) Miscellaneous (as required).

We believe all above "unbundled" costs must be kept as low as possible in the early phases of transition. We are confident the ICs and all telecommunications customers will support this position. Costs can be calculated and philosophied in numerous ways. In this case, the end must justify the means.

We believe the first step in the transition of the local exchange to a competitive environment is by switch collocation. This is not a new concept. This concept was proposed by Ameritech several years ago.
(See attached Drawing No. 1, Switch Collocation Example.)

The fundamental issues are:

a) How much cost for the use of the wire?
b) Will the ICs pay higher access charges to the switch collocator?
c) Certainly all players should contribute to the USF.
d) Will any portion of the USF be directed to the switch collocator?
e) Clearly the price of alternative dial tone should remain roughly equivalent to the existing RBOC price; it would not be in the public interest if all subscribers desired "dial tone" from the switch collocator. CITLE would be moot if no one wanted alternative dial tone.
f) Until dialing parity and/or no additional post-dial delay, the switch collocator should net revenue on all interconnecting calls - Similar to the 55% discount enjoyed on both ends of every interconnection by the upstart ICs during transition to equal access during divestiture. The cost of equal access conversion by RBOCs was estimated in several articles to approach many billions of dollars; also many believe the cost was borne fundamentally by AT&T.

When Signaling System Seven (SS7) is readily available, fully interconnected, enabling no need to change a customer's telephone number and no additional post dial delay if the customer elects to change local carrier, the division of revenue (inextricably linked to USF and COLR) must be readdressed. By this time, however, the new entrant into the local exchange must achieve "critical mass" for long term survival.

During the transition period (and perhaps forever), the COLR should always be kept reasonably whole and encouraged to maintain healthy profits.

Therefore, the challenge becomes a balance between increasing the flat rate of a telephone customer's bill, increased access charges to the ICs (and associated increased prices for services) and a consolidated net revenue flow from RBOC to new entrant(s). Included in this mix should be the goal of "unbundled" prices being kept as low as possible.

Many will argue that the RBOCs will help their competitors get "off the ground". This may indeed be the case. Having the benefit of hindsight, it would be wise to compare this situation and its eventual outcome with "divestiture".

The RBOC may be able to slightly increase prices on diminishing monopoly services, slightly compromise short term earnings and profits (offset by increases in revenues enabled by increased business freedoms relative to long distance entry, video and/or manufacturing profits) and/or new service offerings. In "low tier" enhanced "supercordless" business plans (a service offered in Japan but not yet offered in the U.S.), typically one-fourth of the revenues of the PCS companies flow to the enbedded LEC for use of their wire, etc. ("unbundled elements"). If there ends up to be two or three competitors in the U.S. providing this totally new service, this could significantly improve all RBOCs revenue positions.

A balance of the service users, the ICs, the newly "freed" RBOCs and the USF - Quite a challenge to say the least! However, we believe this to be much better than uncontrolled competitive chaos and/or "cream skimming". There is precedent for this interim duopoly (or triopoly +) framework; it is called cellular.

Phase One provides a framework for compromise.

PHASE TWO:

It is envisioned that the transport from the switch to the customer will, soon after Phase One, include enhanced COAX and/or wireless interconnection. At that point in time, for the first time in the history of the U.S., there will be a framework enabling facility based competition from the already competitive IC arena to the already competitive CPE arena. (See attached Drawing No. 2, Local Competition, Service and Technology Entirely Market Driven, and Drawing No. 3, Switched Broadband Evolution.)

LATTER PHASES:

It is also envisioned that in a latter phase and over time, the intraLATA network may be physically duplicated. This would allow users a choice relative to all intraLATA services.

It is our opinion that, as was "divestiture", this grandiose experiment be refined in the large company arena before allowed to impact small rural telcos.

Do not base "technically feasible" interconnection points limited by the past; this is the future. Encourage resell but do not allow CITLE to only be an illusion. Target interconnection biases to reward architectures, equipments and technologies that provide fundamentally sound, long term viability; open system interconnection, multi-vendor equipment approaches, and flexible systems positioned to provide enhanced affordable services soon to the mass market irregardless of geographic penalties.

Position the regulatory environment to be referees and allow free market forces to drive technology deployment to enable services that were only a dream yesterday to become a reality tomorrow. Via USF targeting (and potentially other methods), enable all Americans to enjoy the increasing benefits of better communications.

Respectfully submitted,

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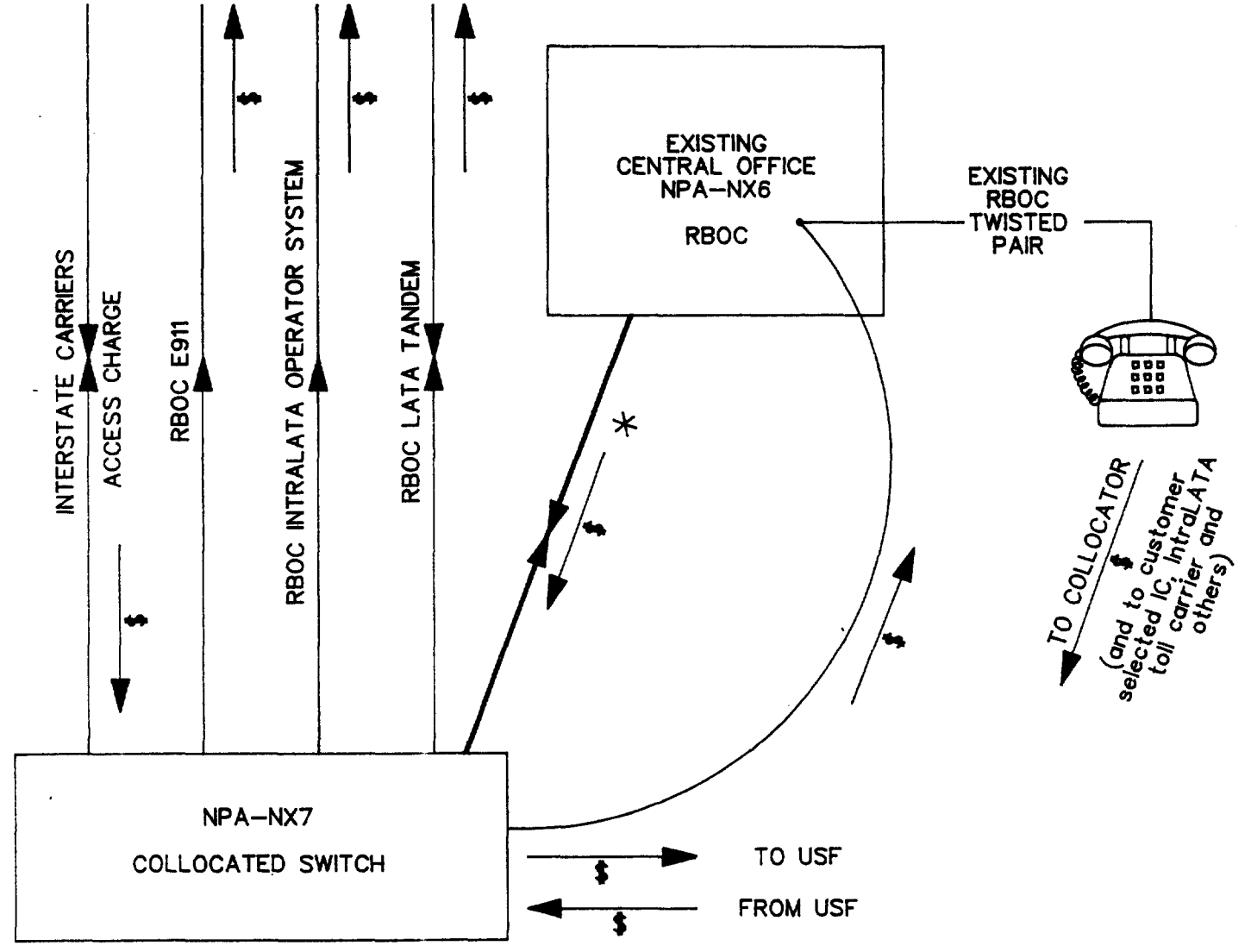
Attachments:
1. Drawing No. 1, Switch Collocation Example
2. Drawing No. 2, Local Competition, Service and Technology Entirely Market Driven
3. Drawing No. 3, Switched Broadband Evolution

DocA:Telcom.COM

SWITCH COLLOCATION EXAMPLE

Trunking Diagram

Proposed "Unbundled" Charge and Revenue Arrangements



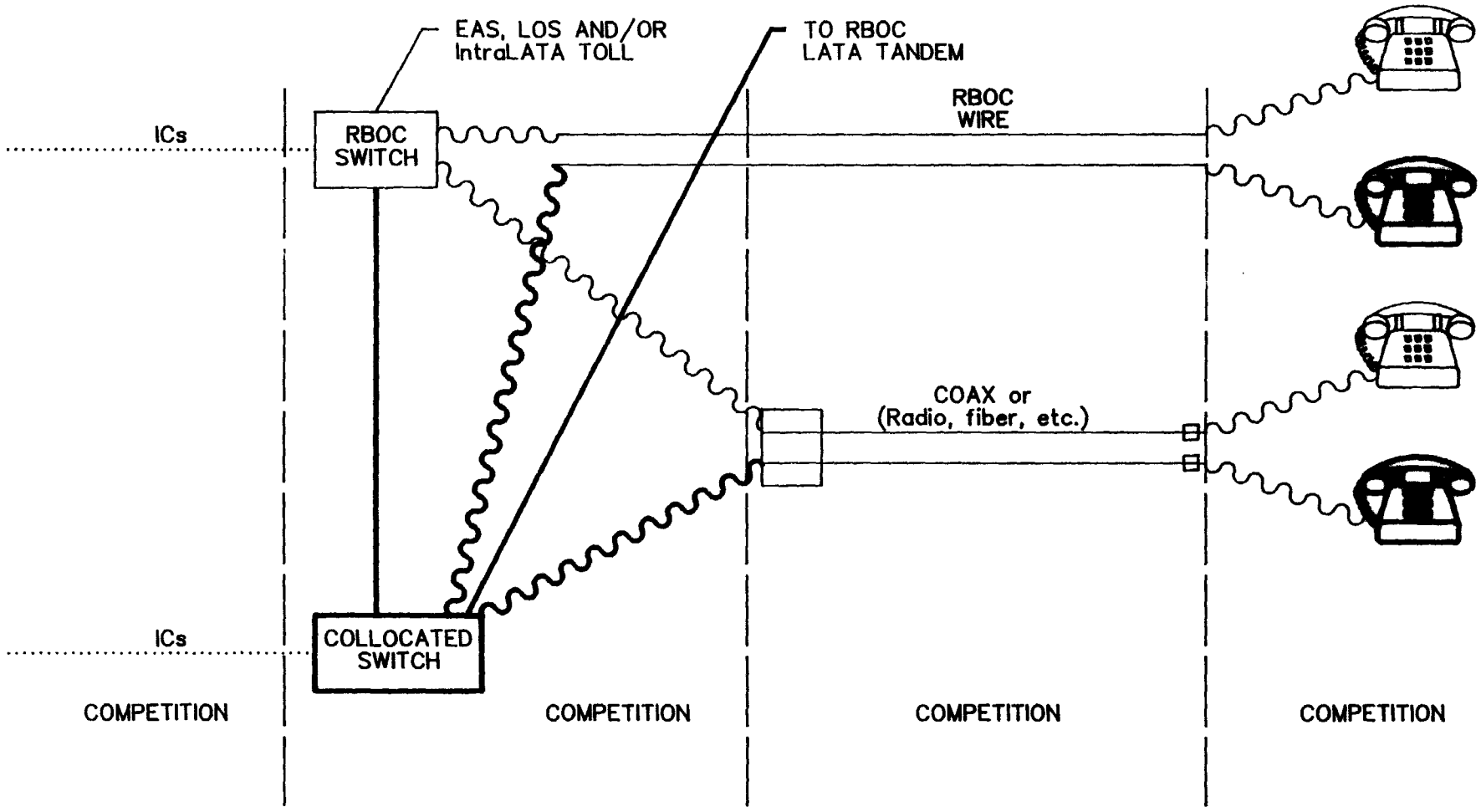
ONE WAY TRUNK
TWO WAY TRUNK
DENOTES NET REVENUE FLOW
COMPETITIVE INTERCONNECTING TRUNK GROUP (CITG)
USF — UNIVERSAL SERVICE FUND

DOC#PWC01

DRAWING NO. 1

LOCAL COMPETITION, SERVICE AND TECHNOLOGY ENTIRELY MARKET DRIVEN

[Except for Telephone (Service) Number Portability]



ACRONYMS:

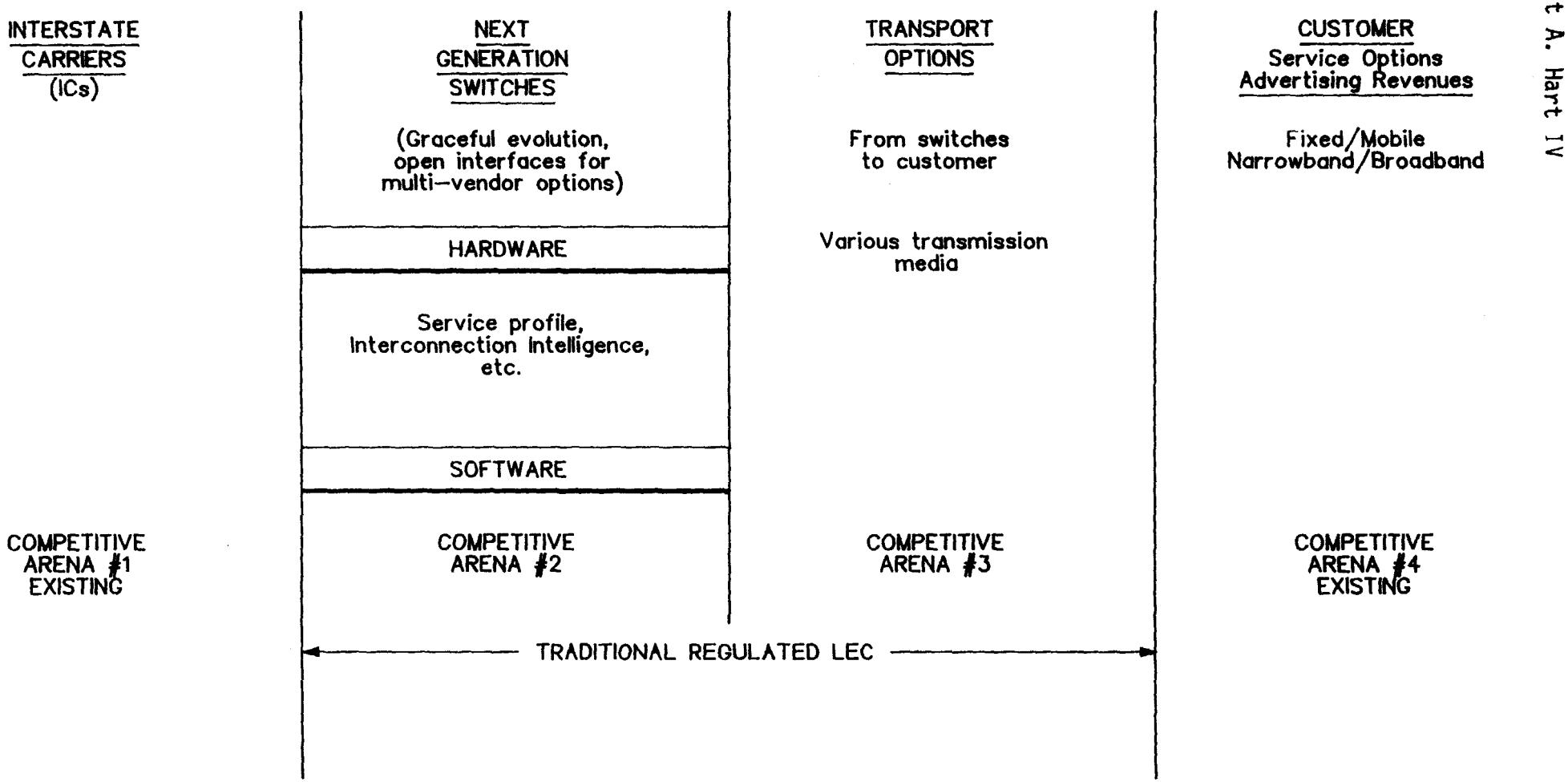
EAS	Extended Area Service
IC	Interstate Carrier
LOS	Local Optional Service
RBOC	Regional Bell Operating Company
.....	Trunk Groups

UNBUNDLED ENHANCED UNIVERSAL SERVICE FUND					
INTERSTATE					
INTRASTATE					

DRAWING NO. 2

SWITCHED BROADBAND EVOLUTION –

Competitive (Market Driven) Environment



DRAWING NO. 3

CERTIFICATE OF SERVICE

I, Ann Eichelberger, hereby certify that a copy of the foregoing Comments of Robert A. Hart IV in CC Docket No. 96-98 was served on this 15th day of May 1996, by first class, U.S. mail, postage prepaid, to the following parties.

Ann Eichelberger

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